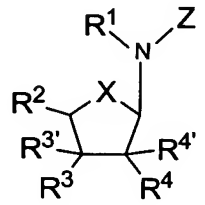
What is claimed is:

1. A method of treating or preventing a disease resulting from a somatic mutation in DNA or RNA comprising administering to a patient in need thereof an effective amount of a compound having the structure:



I

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, racemate or stereoisomer thereof, wherein:

Z is substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl;

X is CH_2, O, S or NH;

R^1 is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl;

R^2 is substituted or unsubstituted alkyl, carboxy, amido, acyl, alkylcarbonyl, halogen, a biohydrolyzable group, $OP(O)_3^{2-}$, $O[P(O)_3]_2^{3-}$, $O[P(O)_3]_3^{4-}$, N_3, CH_2-NR_6R_7 or CH_2-OR^6;

R^3, $R^{3'}$, R^4 and $R^{4'}$ are at each occurence independently OR^7, OR^8, hydrogen, halogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together form a

bond, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo, or R^3 and $R^{3'}$ and/or R^4 and $R^{4'}$ taken together with the carbon to which they are attached form C(=O); and

R^6, R^7 and R^8 are at each occurrence independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo.

2. The method of claim 1, wherein the compound, or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof, is administered as a composition comprising the compound and a pharmaceutically acceptable carrier or diluent.

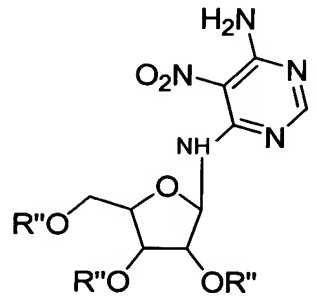
3. The method of claim 1, wherein the administration is intravenous.

4. The method of claim 1, wherein Z is monocyclic.

5. The method claim 1, wherein Z is substituted or unsubstituted pyrimidinyl.

6. The method claim 1, wherein X is O.

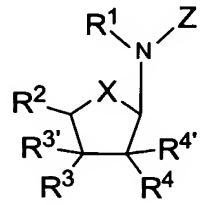
7. The method of claim 1, wherein the compound has the structure:



or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, racemate or stereoisomer thereof, wherein each occurrence of R'' is independently hydrogen, $OP(O_3)^{-2}$, $C(=O)CH_3$ or a biohydrolyzable group.

8. The method of claim 1, wherein each occurrence of R'' is hydrogen.

9. A method of treating or preventing cancer in a human comprising administering to a human in need thereof an effective amount of a compound having the structure:



I

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, racemate or stereoisomer thereof, wherein:

Z is substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl;

X is CH_2, O, S or NH;

R^1 is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl;

R^2 is substituted or unsubstituted alkyl, carboxy, amido, acyl, alkylcarbonyl, halogen, a biohydrolyzable group, $OP(O)_3^{2-}$, $O[P(O)_3]_2^{3-}$, $O[P(O)_3]_3^{4-}$, N_3, CH_2-NR_6R_7 or CH_2-OR^6;

R^3, $R^{3'}$, R^4 and $R^{4'}$ are at each occurence independently OR^7, OR^8, hydrogen, halogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together form a bond, or R^3 and R^4 taken together with the atoms to which they are attached form a

substituted or unsubstituted heterocyclo, or R^3 and $R^{3'}$ and/or R^4 and $R^{4'}$ taken together with the carbon to which they are attached form C(=O); and

R^6, R^7 and R^8 are at each occurrence independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo.

10. The method of claim 9, wherein the administration is intravenous.

11. The method of claim 9, wherein the cancer is of the head and neck, eye, skin, mouth, throat, esophagus, chest, bone, blood, lung, colon, sigmoid, rectum, stomach, prostate, breast, ovaries, kidney, liver, pancreas, brain, intestine, heart or adrenals.

12. The method of claim 9, wherein the compound, or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof, comprises a pharmaceutically acceptable carrier or diluent.

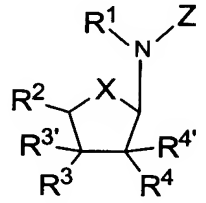
13. The method of claim 9, wherein the cancer is a solid tumor.

14. The method of claim 9, wherein the cancer is sarcoma, carcinoma, fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, colon carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, cervical cancer, testicular tumor, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma, ependymoma, Kaposi's sarcoma, pinealoma, hemangioblastoma, acoustic neuroma,

oligodendroglioma, menangioma, melanoma, neuroblastoma, retinoblastoma, a blood-born tumor or multiple myeloma.

15. The method of claim 9, wherein the cancer is acute lymphoblastic leukemia, acute lymphoblastic B-cell leukemia, acute lymphoblastic T-cell leukemia, acute myeloblastic leukemia, acute promyelocytic leukemia, acute monoblastic leukemia, acute erythroleukemic leukemia, acute megakaryoblastic leukemia, acute myelomonocytic leukemia, acute nonlymphocyctic leukemia, acute undifferentiated leukemia, chronic myelocytic leukemia, chronic lymphocytic leukemia, hairy cell leukemia, or multiple myeloma.

16. A method of treating or preventing a disease associated with a mutation of the p53 gene comprising administering to a patient in need thereof an effective amount of a compound having the structure:



I

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, racemate or stereoisomer thereof, wherein:

Z is substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl;

X is CH_2, O, S or NH;

R^1 is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl;

R^2 is substituted or unsubstituted alkyl, carboxy, amido, acyl, alkylcarbonyl, halogen, a biohydrolyzable group, $OP(O)_3^{2-}$, $O[P(O)_3]_2^{3-}$, $O[P(O)_3]_3^{4-}$, N_3, CH_2-NR_6R_7 or CH_2-OR^6;

R^3, $R^{3'}$, R^4 and $R^{4'}$ are at each occurence independently OR^7, OR^8, hydrogen, halogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together form a bond, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo, or R^3 and $R^{3'}$ and/or R^4 and $R^{4'}$ taken together with the carbon to which they are attached form C(=O); and

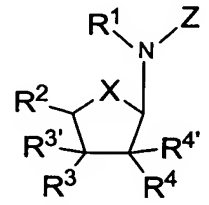
R^6, R^7 and R^8 are at each occurrence independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo.

17. The method of claim 16, wherein the administration is intravenous.

18. The method of claim 16, wherein the disease is sarcoma, carcinomas, fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, colon carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, cervical cancer, testicular tumor, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma,

ependymoma, Kaposi's sarcoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, menangioma, melanoma, neuroblastoma or retinoblastoma.

19. A method of inhibiting the growth of a cancer cell comprising contacting the cancer cell with an effective amount of a compound having the structure:



I

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, racemate or stereoisomer thereof, wherein:

Z is substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl;

X is CH_2, O, S or NH;

R^1 is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl;

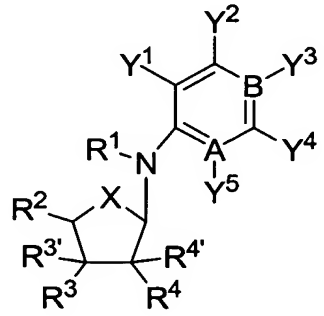
R^2 is substituted or unsubstituted alkyl, carboxy, amido, acyl, alkylcarbonyl, halogen, a biohydrolyzable group, $OP(O)_3^{2-}$, $O[P(O)_3]_2^{3-}$, $O[P(O)_3]_3^{4-}$, N_3, CH_2-NR_6R_7 or CH_2-OR^6;

R^3, $R^{3'}$, R^4 and $R^{4'}$ are at each occurence independently OR^7, OR^8, hydrogen, halogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together form a

bond, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo, or R^3 and $R^{3'}$ and/or R^4 and $R^{4'}$ taken together with the carbon to which they are attached form C(=O); and

R^6, R^7 and R^8 are at each occurrence independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo, with the proviso that the cancer cell is not a leukemia cancer cell.

20. A compound having the structure:



II

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate, racemate or stereoisomer thereof, wherein:

X is CH_2, O, S or NH;

R^1 is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl;

R^2 is substituted or unsubstituted alkyl, carboxy, amido, acyl, alkylcarbonyl, halogen, a biohydrolyzable group, $OP(O)_3^{2-}$, $O[P(O)_3]_2^{3-}$, $O[P(O)_3]_3^{4-}$, N_3, CH_2-NR_6R_7 or CH_2-OR^6;

R^3, $R^{3'}$, R^4 and $R^{4'}$ are at each occurence independently OR^7, OR^8, hydrogen, halogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^3 and R^4 taken together form a bond, or R^3 and R^4 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo, or R^3 and $R^{3'}$ and/or R^4 and $R^{4'}$ taken together with the carbon to which they are attached form C(=O);

R^6, R^7 and R^8 are at each occurrence independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted arylcarbonyl, substituted or unsubstituted alkylcarbonyl, a biohydrolyzable group, or R^7 and R^8 taken together with the atoms to which they are attached form a substituted or unsubstituted heterocyclo;

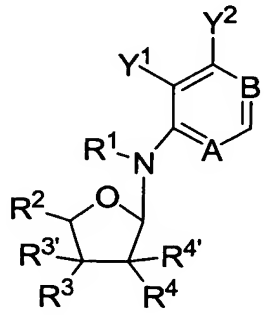
A and B are each independently C or N;

Y^1-Y^5 are each independently hydrogen, hydroxy, halogen, nitro, cyano, sulfate, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl, alkoxy, alkylthioether, carboxyalkyl, carbonylalkyl, amino, $NR^5R^{5'}$, amido, or alkoxycarbonyl, wherein if B is N, Y^3 can also be O^- and if A is N, Y^5 can also be O^-, and wherein Y^3 is not present if B is N and Y^5 is not present if A is N; and

R^5 and $R^{5'}$ are each independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclo, substituted or unsubstituted arylalkyl, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted heterocycloalkyl,

with the proviso that the compound is not 6-Amino-5-nitro-4-(β-D-ribo-furanosylamino)pyrimidine.

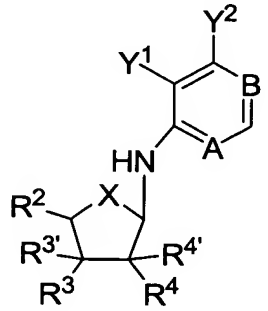
21. The compound of claim 20, wherein the compound has the structure:



III

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof.

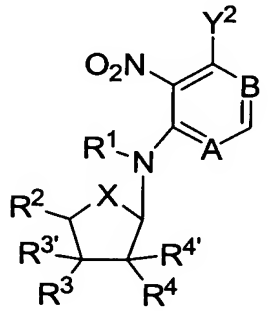
22. The compound of claim 20, wherein the compound has the structure:



IV

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof.

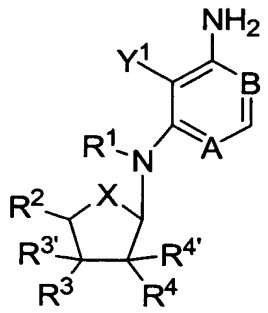
23. The compound of claim 20, wherein the compound has the structure:



V

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof.

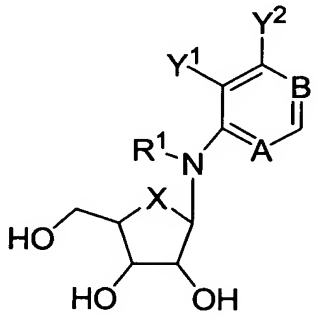
24. The compound of claim 20, wherein the compound has the structure:



VI

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof.

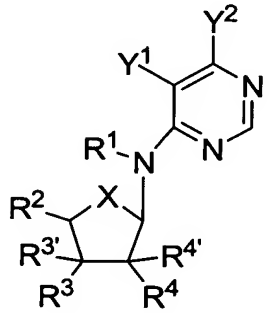
25. The compound of claim 20, wherein the compound has the structure:



VII

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof.

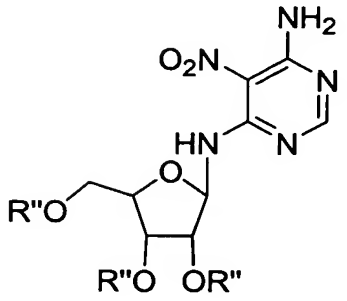
26. The compound of claim 20, wherein the compound has the structure:



VIII

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof.

27. The compound of claim 20, wherein the compound has the structure:



IX

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof, wherein each occurrence of R'' is independently hydrogen, $OP(O_3)^{-2}$, $C(=O)CH_3$ or a biohydrolyzable group.

28. A compound, wherein the compound is:

6-(*N*-methylamino)-5-nitro-4-(β-D-ribo- furanosylamino)pyrimidine;

5,6-Diamino-4-(β-D-ribofuranosyl-amino)pyrimidine;

3-Nitro-2-(β-D-ribofuranosyl-amino)pyridine;

5-Nitro-2-(β-D-ribofuranosyl-amino)pyridine;

(1R,2S,3R,5R)-3-(6-Amino-5-nitro-pyrimidin-4-ylamino)-5-hydroxymethyl-cyclopentane-1,2-diol;

(1S,2R,3S,5S)-3-(6-Amino-5-nitro-pyrimidin-4-ylamino)-5-hydroxymethyl-cyclopentane-1,2-diol;

6-methoxy-3-nitro-2-(β-D-ribofuranosyl-amino)pyridine;

6-(dimethylamino)-5-nitro-4-(β-D-ribo-furanosylamino)pyrimidine;

6-(thiomethyl)-5-nitro-4-(β-D-ribo-furanosylamino)pyrimidine;

5-nitro-4-methyl-2-(β-D-ribofuranosyl-amino)pyridine;

6-amino-5-nitro-4-(2,3-*O*-isopropylidene-β-D-ribofuranosylamino)pyrimidine;

6-(2-hydroxy-ethylamino)- 5-nitro-4-(β-D-ribo-furanosylamino)pyrimidine;

6-(ethylamino)-5-nitro-4-(β-D-ribo-furanosylamino)pyrimidine;

6-(4-methoxy-benzylamino)- 5-cyano-4-(β-D-ribo-furanosylamino)pyrimidine;

3-cyano-2-(β-D-ribofuranosyl-amino)pyridine;

6-hydroxy-5-nitro-4-(β-D-ribofuranosylamino)pyrimidine;

6-amino-5-nitro-4-(β-D-xylofuranosylamino)-pyrimidine;

6-amino-5-nitro-4-(β-L-ribofuranosylamino)-pyrimidine;

6-amino-5-nitro-4-(5-deoxy-5-fluoro-β-D-ribofuranosylamino)-pyrimidine;

6-amino-5-nitro-4-(5-deoxy-5-azido-β-D-ribofuranosylamino)-pyrimidine;

6-amino-5-nitro-4-(α-D-ribofuranosylamino)-pyrimidine;

6-Amino-5-nitro-4-[(5-*O*-acetyl-β-D-ribofuranosyl)amino]pyrimidine;

6-Amino-5-nitro-4-[(2,3,5-tri-*O*-benzoyl-β-D-ribofuranosyl)amino]pyrimidine;

Methyl 6-amino-4-(β-D-ribofuranosylamino)pyrimidine-5-carboxylate;

Methyl 6-chloro-4-(β-D-ribofuranosylamino)pyrimidine-5-carboxylate;

Methyl 6-amino-4-(α-D-ribofuranosylamino)pyrimidine-5-carboxylate;

Methyl 6-chloro-4-(α -D-ribofuranosylamino)pyrimidine-5-carboxylate;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-3,4-dihydroxy-tetrahydro-furan-2-carboxylic acid;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-3,4-dihydroxy-tetrahydro-furan-2-carboxylic acid amide;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-3,4-dihydroxy-tetrahydro-furan-2-carbaldehyde;

2-(6-Amino-5-nitro-pyrimidin-4-ylamino)-5-(1-hydroxy-ethyl)-tetrahydro-furan-3,4-diol;

2-(6-Amino-5-nitro-pyrimidin-4-ylamino)-5-methyl-tetrahydro-furan-3,4-diol;

2-(4-Amino-3-nitro-pyridin-2-ylamino)-5-hydroxymethyl-tetrahydro-furan-3,4-diol;

2-(5-Amino-4-nitro-pyridin-3-ylamino)-5-hydroxymethyl-tetrahydro-furan-3,4-diol;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-2-hydroxymethyl-tetrahydro-furan-3-ol;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-4-fluoro-2-hydroxymethyl-tetrahydro-furan-3-ol;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-4,4-difluoro-2-hydroxymethyl-tetrahydro-furan-3-ol;

2-(6-Amino-5-nitro-pyrimidin-4-ylamino)-4-fluoro-5-hydroxymethyl-tetrahydro-furan-3-ol;

2-(6-Amino-5-nitro-pyrimidin-4-ylamino)-4,4-difluoro-5-hydroxymethyl-tetrahydro-furan-3-ol;

[5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-2,5-dihydro-furan-2-yl]-methanol;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-2-hydroxymethyl-3-methyl-tetrahydro-furan-3,4-diol;

2-(6-Amino-5-nitro-pyrimidin-4-ylamino)-4-hydroxy-5-hydroxymethyl-dihydro-furan-3-one;

5-(6-Amino-5-nitro-pyrimidin-4-ylamino)-4-hydroxy-2-hydroxymethyl-dihydro-furan-3-one;

2-Aminomethyl-5-(6-amino-5-nitro-pyrimidin-4-ylamino)-tetrahydro-furan-3,4-diol;

2-(6-Amino-5-nitro-pyrimidin-4-ylamino)-5-(2-hydroxy-ethyl)-tetrahydro-furan-3,4-diol;

2-(6-Amino-5-nitro-pyrimidin-4-ylamino)-5-hydroxymethyl-tetrahydro-thiophene-3,4-diol;

2-(2-Amino-3-nitro-pyridin-4-ylamino)-5-hydroxymethyl-tetrahydro-furan-3,4-diol;

4-amino-6-(3,4-dihydroxy-5-hydroxymethyl-tetrahydro-furan-2-ylamino)-pyrimidine-5-carboxylate;

4-Amino-6-(3,4-dihydroxy-5-hydroxymethyl-tetrahydro-furan-2-ylamino)-pyrimidine-5-carboxylic acid;

2-Hydroxymethyl-5-(5-nitro-pyrimidin-4-ylamino)-tetrahydro-furan-3,4-diol;

2-(6-Amino-5-nitro-pyridazin-4-ylamino)-5-hydroxymethyl-tetrahydro-furan-3,4-diol;

2-(5-Amino-4-nitro-pyridazin-3-ylamino)-5-hydroxymethyl-tetrahydro-furan-3,4-diol;

or a pharmaceutically acceptable salt, hydrate, solvate, clathrate or stereoisomer thereof.